Field Trip No. 7

Northern Tablelands, Darling Downs, Surat,
Liverpool Plains

27/3/1941 — 11/4/1941

K. H. L. Key

Seventh Field Trip. (27/3/41 – 11/4/41)

Northern Tableland, Darling Downs, Surat, Liverpool Plains.

From Morisset, range of steep timbered hills to left of road, bending across road to right & left at ca. Brunkerville. Except for cleared country ~~[illegible]~~ between Gosford & Wyong, all timbered. A little cleared round Morisset. At Brunkerville (19396) consid. clearing, opening directly into H.R.V. Brunkerville to Mulbring we are in a tongue of the H.R.V., with timbered barrier hills to right & left. After the Cessnock turn-off, we enter timber & some hills at 403, which continue (at least the timber) to Cessnock at 411, extending a good way to the north.

Cessnock (411) to Branxton:- Cleared all the way, except for a patch of timber, mainly uncleared, at 422 – 425 (Branxton). Branxton – ca. 433, somewhat hilly, w. a little timber. Gently undulating to flat from 433.

Singleton (444) – Denman:-

444-6 Brown to red brown sandy loam treeless or cleared almost flat. 446-61 Gently hilly ironbark dogwood woodland, hard pale-red brown sandy loam. O-C. – box – from 461 Steep timbered hills at 2-3 miles left of road. 463-69

19463-4 : {Austracris guttulosa
Aiolopus tamulus
Froggattina australis

flat plain, skirted by pale red-brown hard hills to left. Brown greasy. 19463. Chortoicetes occ. Austracris occ. 464. Watercourse w. heavy s.m. dark choc. soil to right of road. Margins greasy brown, more or less bare. Pasture couch, Pasp. distich. (?) occ. Chloris sp. Dense in watercourse. Photos 2 & 3. Oedaleus & pusilla fairly numerous on barer areas. Chort. & Aiolopus quite numerous in watercourse & frequent elsewhere. Froggattia & Pycnostictus occ. A little further on, in dense green couch pasture, no bare space, found 18/200 yds. This would be consid. less than those at watercourse. Jerry's Plains at 466.

469-71 mainly pale red-brown hard, with ironbark.
x Humber Rd. patch of mixed country with water course
71-5 hilly crossing a ridge, ironbark n.l. box & dogwood.
hard pale red brown & some firm & slightly self mulching
red ground. 75: A road crosses edge of another plain
probably mixed to the left. 75-81 more hilly country with ironbark, n.l. box, & dogwood & kurrajong. Soil hard pale red-brown & a little firm-slightly s.m. red-brown. 81-83 (Denman) acts. of compact & s.m. 491 No Chort/200 yds. on flat, greasy-slightly s.m. med. grey soil w. couch, Chloris, Eragrostis sp. (spec.) & Marsilea in ca. equal props. Little bare space.

Quirindi (turnoff) (~~552~~) (19552)

552-59 abrupt short medium term alternation of heavy s-m. black from basalt & pale brown hard, white box woodland. Hilly

558-70 alternation of pale brown & red brown hard & red-brown to chocolate – friable slightly selfmulching with very occasional small patches of black

70·75 almost all hard pale brown & red brown with small patch black heavy self mulching at 75

Tintinhull range to left between 61 & 79. 75-97 (Tam.) alts. & intersp. of pale brown-red-brown hard, & red-brown to choc. slightly-mod. s.m., with occ. patches heavy s.m. choc. – black. Woodland all way from Murrurundi, w. white box dom. with other eucs., incl. n.l. box.

(597)
Tamworth-Armidale :-

97-605 As before but no selfmulching

05-14 Pale hard to sandy podsolized – all woodland – white box & other eucs. Tintinhull range to left?

61~~4~~ – 18?. (Tintinhull range)

At Armidale :- Oedaleus, Acrida.

19713-6 : {Perala viridis
Phaulacridium vittatum

19722 : {Perala viridis,
Goniaea sp.

196/8-27 Woodland with patches dense timber

27-31 about ½ woodland & ½ dense timber

excess
31-43 ditto or dense timber slightly in XS.

43- Arm. woodland with small clumps hier
Froggattia betw. Denman & Muswellbrook. C. Davis has record from Springridge (Liverpool Plains).

Armidale - Glen Innes :-

67½ -82✓ Hilly woodland on hard brown

82 - 92✓ ditto on pale podsolized

92 - 96 dense timber on hard & firm brown
(Glen I.)

696 — 741 woodland on firm gravelly purple-brown soil derived from basalt. 700. Caledia, Gastrimargus, Oedaleus, 1 Chortoicetes. Pasture mainly "Andropogon".

Guyra 703. In low-lying areas soil approaches black, & is slightly sour. 713. Swampy area w. "Andropogon"

Laxabilla smaragdina smaragdina (R), Praxibulus insculptus (R)
Scirpus, etc. Gastrimargus, ~~[illegible]~~, Praxibulus (?),
Bermius brachycerus brachycerus (R) | Attractomorpha crenaticeps australis (R)
Bermius, Attractomorpha. Perala. Soil near black, slightly sour 775: Oedaleus, Caledia, Gastrimargus,
Laxabilla smaragdina inter S. smaragdina & S. acuta (R)
Phaulacridium, Acrida, ~~[illegible]~~.

Tenterfield (799) - Killarney :- 799-805 woodland on pale & pale brown hard. 805-40 Dense timber with occasional small clearings on pale hard.

Moraba fratercula (R)
812. Phaulacridium & others. 40-59 (Legume) woodland with occasional small patches of timber. from ca. 55. a little

rain-forest may be seen on the hill-tops to the left. From Legume to Killarney soil is more or less black, derived from basalt, & originally covered with rain-forest. Now cleared & densely pastured with ca. 2ft. high grass.

2 miles up the valley from Killarney:- Remains of rain forest on mod. sy. choc.-black. Mainly dense Paspalum.
Atractomorpha crenaticeps, interm. betw. C. crenaticeps & C. australis (R)
Foll. spp. in add. to those coll.:- Austacris gutt., Acrida, Chortoicetes (2).

(1871)
Killarney-Warwick: 71-80 alts. of heavy sy. black, mod. sy. choc. to brown, and a little firm brown to choc. on rises. 880. On firm pale brown rise: Oedaleus, Austroicetes pusilla, Acrida, Froggattia, Chortoicetes. 80-86 excellent short term alts of heavy sy. black & pale red-brown to brown hard, the former treeless, the latter cleared from mainly Nl. box. 86-92 (Warwick) Hard pale red-brown, slightly sandy in places, with Nl. box, cabbage, & other eucs.

The collections of Tipurga & Cedarinia were mainly made from the firm-slightly sy. rises on the Warwick-Toowoomba road. There were more of these rises on

19900: Cedarinia sp., Tipurga sp.
19934: Moraba cultrata carissima (atypical)(R), Cedarinia sp., Tipurga sp., Phaulacridium vittatum

the eastern (wet-weather road) than on the dry weather road, but apparently little or no hard.

(19963)
Toowoomba – Oakey: – 63–66 Red loam. 66–67 dark red-brown 67–81 alts & intergs. of black heavy s.m. & choc.-brown firm hard. All gently hilly so far. Woodland. 977 No Chort./200 yds. 2–3 ft. dense Q. blue-grass. A. gutt. numerous – ca. 100/200 yds. Tipurga occ. Soil hard-firm brown. 81. Oakey.

Macrotona sp.

Oakey – Cooyar: 81–20005 alts & intergs. of hard-firm brown, greasy brown & dark gb., & mod. s.m. dark grey. From 87 cleared from belah. mulga & poplar box. 88. A. gutt., Acrida, Aiolopus, Froggattia, occ. Chort. 19999. No Chort. in 200 yds 2 ft. dense pasture of blue-grass, Sporobolus, Eragrostis, little Chloris, etc. A. gutt., Acrida, Gastr. (1), Tipurga (occ.) Cedarinia (occ.) Bermius, Froggattia (occ.) ca. 20003+ (Kulpi) a little brigalow – s.w. scrub on deep red-brown. ca. 20005 – 20025 (Cooyar) alts. & intergs. of pale greasy, hard or sandy, with ironbark & other eucs, and heavy s.m. dark grey-black., the former (pale) predominating. Only partially cleared from ca. 14.

Cedarinia sp.

Cooyar – Bell: 25–31 alts of pale hard & heavy s.m. black. [illegible] 31–44 mainly alts of hard dark red-brown, hard choc., & heavy black s.m. patches on flats. 35–41 mainly uncleared. All hilly. 41–44 cleared brig.-belah-mulga in mixtures & alts w. s.w. scrub. 43. Collecting site in remains of

Cedarinia sp., Valanga sp., Coryphistes sp.,

Moraba cultrata cultrata (R), Ecphantus sp., Macrotona securiformis
sw. scrub. Also seen: Bermius. Phaul., Acrida, A. gutt.

200
44–59 Alts of hard brown w. pop box & darkgrey sm, mainly
All cleared, the heavy soil mainly from brig.-belah patches; sw. scrub
former. 48. Maclagan. patches also present.

From 59, no more sw. scrub 20061 ~~#~~ Kaimkillenbun.

Apparently I got off the Cooyar-Bell road at ca. 41,
& was then following the Maclagan – "Bunya Mts" road.
The soil must be considered favourable
throughout the area traversed, though from 25 to ca.
44 the hills are pretty steep, & much un-cleared &
~~sandbarred~~ partly cleared timber would impede
movements.

(080) Kimkell
Dalby – ~~Bell~~. 82 ~~Ok~~ 1? Chort. Tipurga sp. 200yds 3ft. high dense blue-grass-
dominant pasture on greasy- mod. sm, darkgrey. 80–83
(Kim turn-off) Slow alts of firm pale gh & mod. sm, dark
grey. 83– ~~89~~ 93 (Kim) Heavy sm ~~jt~~ black, ~~89–93 (Kim)~~ not quite
so jet from ca. 89. From 89 occ. patches box on slightly
lighter soil, though still heavy sm. Perfectly flat to 91, then
very slightly undulating to Kim, which is at head of a
valley, low hills at a distance on both sides from ca.
89. Small hard, slightly stony rise (only few ft.) at 93.
From Kim. it is still mainly heavy sm dampish plain for ca. 1 mile
along Maclagan road.

20(112)
Kin turn-off to Bell :– [Most intelligent woman said that locusts had been breeding in the Hayfields area (the lighter soil area from Dalby to the wireless station, during 1935 & 1936 before they spread in 1937 to her place (almost at Kin.) The two seasons "1935" & "1936" (presumably 1935-6 & 1936-7) had been dry. Area of the present density had not been developed.] 112 – 117 Heavy s.m. black, slightly lighter in places. Quite flat to 115, then very gently undulating with patches of pop box. ~~(not pop box)~~ ~~Gently hilly~~ 117-34 (Bell) Gently hilly, ~~soil~~ hard-firm choc, often stony, with Eucs, art. woodland (pop. box, mainly on lower & flatter country, & others) alternating with heavy s.m. black & choc. soils in the hollows & small flat plains, sometimes connecting with main plain to SW. Most sites Themeda alts. Tipurga & Cedarinia absent except for one record near Dalby. Aust gutt. numerous, esp. on black plains. Froggattina also present at almost all sites examined. App. requires long grass rather than light soil.

(34)
Bell – Jandowae via Cooranga ~~3~~ 41. S.W. scrub. Valanga, A. gutt. & prox., Catantops, Acrida, Phaul. 34 – 50 alts & inters. of hard-firm brown & choc. & heavy s.m. choc. in hilly country with alts & inters of Eucs. (pop box & others), brigalow-belah, & s.w. scrub in ca. equal props. Cleared to ca. 41. Then small patches of

uncleared timber & bigger areas of partially cleared.

20151 – 56 hard brown, w. pop. box & eucs. for ca. 2 miles, then
ironbark ? Euc. maculata (fairly certain)
n.l. ~~box~~ dom., mixed with cabbage on rises. Partly
cleared to 53, dense timber from 54 to 56. 56 – 60 mainly pop.
on hard brown to pale red-brown
n.l.
box – ironbark alts. & intergs.) with patches of brigalow
Monistria pustulifera pustulosa (atyp.)(R), Lacabella smaragdina
on firm – hard brown – choc. 159. Assn. of pop. box, wilga,
brig. occ. acuta (R)
~~[illegible]~~ & belah on firm – hard brown. No Chort. in 200 yds 2 ft.
dense pasture of blue-grass – Chloris sp. (tall). A. gutt. & prox.,
Gast. more numerous than I have seen in this latitude
(ca. 20 – 30/200 yds). Note that this soil is lightish, but
grass growth good. App. Gast. requires light soil. 60 – 69 (Gandor.)
Very mixed assn. including intergs. of box, brig., belah,
wilga, sw. scrub-bbw, b.l. ironbark & even occ. pine, on
hard-firm brown to red-brown. One or two patches heavy
gm. choc. w. brig., belah from 65.

(170)
Gandowal – Chinchilla. 70 – 72 greasy – mod. gm. dark grey.
72 – alts. & intergs. of pop. box on greasy – hard brown & red-
= Angophora lanceolata, perhaps also Euc. maculata (on hard)
brown & n.l. ironbark w. occ. cabbage & Moreton Bay ash
on brown – pale hard – sandy. Small patches of brig., belah
on firm brown frequent to 78, then rare. 184. No Chort/200 yds
1 ft. past. of couch, Chloris truncata & Eragrostis sp. in ca
equal props. on brown hard – greasy. Oedaleus. A few Chort
nymphs seen in sparser pasture along road 85 – 92

20192 (Chin.)
~~[illegible]~~-210

(212)
Chinchilla-Miles :- 12-15 box on pale-pale red-brown hard-sandy. 15- Brig. belah on pale grey ~~[illegible]~~ firm - heavy sm. 216 attempted to count Chort., but couldn't on account of num. Aiolopus. Chort. was, however, occ. Acrida num. A. gutt., Trogg., Oed. Pasture w. couch & Eragrostis sp. prominent. Occ. bottle trees.
216-223 nl. ironbark, bull oak & pine w. occ. pop. box, & wattle. Small patch brig.-belah at 19 on pale grey firm-slightly sm. 223-230 brig. on pale gy. firm, greasy & slightly sm., with very well dev. melonholes. 229 No Chort. in scanty variable density pasture, incl. Chloris & Digitaria. A. gutt. & Aiolopus num. Acrida, Schizobothrus. 230-34 nl. ironbark, pine, bull-oak occ. box, occ wattle, only ca. ½ cleared, on pale hard sandy. 34-41 (Miles). Same, wattle more numerous. Practically uncleared.
(242)
Miles-Condamine 42-50 alts of nl ironbark-bull oak-pine & occ. cabbage, on hard sandy pale & pale purplish with pop. box-

Country from miles to Condamine rather less than ½ cleared.

pine-buddah, very occ. M.B. ash & yarran on pale red-brown & brown hard & sandy.
but pine only very occ.
202 50-54. Box-pine-buddah only. 54-~~55~~60 Same as m., plus occ. whitewood & pumaite-leafed tree, very occ. beefwood & mulga. 60-63 (Condamine) Pop. box-buddah-mulga on hard ~~flaky~~ pale red-brown. Small patch firm-slightly gn. at 63. 63-65 Box-buddah-mulga on hard pale red-brown. 65-70 Brig. & b.b.w. on firm-mod. gn. ~~hard~~ med. gb. 70-72 Box-buddah-mulga. 72-76 Box-pine-buddah-tall mc. with dark bark on hard & sandy pale r.b. 76-80 med. term. alts. & sub gps. of box-pine-buddah-bull-oak, occ. beefwood ~~on~~ pale r.b. hard & sandy and belah-mulga, occ. brig. occ. box on firm brown.
80-86 Box-pine-buddah-bull-oak-tall mc. on med. r.b. hard & sandy. occ. belah, occ. pine mulga. 86-88 B.b.w. on firm-mod. gn. med. gb. with melonholes. 88-94 Box-pine-buddah-bull-oak, occ. r.l. ironbark, occ. cabbage, occ. brig, belah, tall mc. & other mcs., b.l. ironbark on hard & sandy pale r.b. 295-302 B.b.w. on firm-mod. gn. med. gb., occ. box in one small area. 302-9 Box-pine-bull-oak, occ. b.l. ironbark, v. occ. r.l. ironbark, v. occ. cabbage on pale r.b. & pale purplish r.b. 9-16 Box-pine-bull-oak-buddah-b.l. ironbark, with some isolated brig & belah on hard & sandy pale r.b. & some med. r.b. & red. Tending to slightly gn. at

NB. The species commonest in S. Qld at present time are all moisture loving – Acrida, A. gutt., Aiolopus.

Pasture mainly couch, sometimes with Sporobolus. on lighter areas, & couch, mitchell & Digitaria to 2ft on heaviest. A. gutt. very numerous on heavier areas. Locusta v. occ. Chort. intermediate.

20 309. where brig-belah thickest & dom. 316–18 Box, etc. as before; no bbw. 18–19 Box-belah-wilga on mod. s.m. brown. 19. Surat road leaves highway. I took ~~Surat~~ Highway. Too dark now to make soil obs. Timber uncleared, or partially & quite ineffectively rung, from Condamine to the Roma-Surat road. There was a small clearing at Timowon (318), & more cleared country at 28–30 and at 36. Otherwise dense timber.

Surat (359) – Glenmorgan :– 360 13 Chort. in 200 yds. 1ft green seeding past. of ? Sporobolus sp. (sample) & a couch (sample), some flinders with a little bare space. Aust. gutt. present but less num. than Chort. No brachypterous spp. seen. Open plain, soil firm – mod. s.m. dark brown. Ca. same no. could be seen ~~at~~ less than a mile further on, on heavy s.m. dark brown, mainly ? couch & flinders, less than 1ft., pract. no bare space. 59–75. Alts & intergs. of heavy s.m. black, heavy s.m. dark brown, mod.-heavy s.m. med. grey, and firm-hard pale brown w. laterite pebbles. Open plain or natural or art. woodland of bl. ironbark, ? bauhinia sp. & pop. box, occ. whitewood. S.m. soil strongly dom. 369. 8 Chort. / 200 yds. 9"–1ft. past. of couch, Sporobolus, button grass & slender panic on hard pale brown to mod. s.m. brown. 75–80 Consid. denser woodland of

bauhinia, box, bl. ironbark, isolated stunted brig.,
isolated belah, buddah, occ. myall, whitewood on
heavy-mod. s.m. pale-med-grey, very similar to
that in Taroom region 20380-~~88~~ 90 alts of mod. s.m. gl. + ~~firm grassy~~
~~leading to 82~~ with firm-grassy pale brown ~~close woodland~~,
Open forest w. box + bl. ironbark. 383 2 Chort/100 yds. 1ft.
densepast. Aristida-Chloris (Glenmorgan) mmc., slight bare space.
A. gutt. fairly common. 90-400 box-buddah-bl. ironbark, occ. occ. pine, rosewood + wilga + some brown grassy
bl. ironbark, on hard pale red-b., rb + red, 393 4 Chort./
100 yds. 6"-1ft. Aristida-Chloris - galv. rollypolly on hard red. consid.
bare space. Sid., A. gutt. Arida. 96 small patch brig. belah,
box on mod s.m. gl. Ca. ½ cleared from 90

Glenmorgan - ~~Taroo~~ (400) Meandarra :- 400-402 As before, cleared 402-414 Dense
uncleared brig., w. occ. belah + box on firm-mod s.m.
pale-med brown + gl. w. well-dev. melonholes. 14-16
(Meandarra) box, bl. ironbark, belah + brig. on firm + hard
pale rb. + rb., cleared.

Meandarra-Condamine : 16-23 alts + intergs. of brig.-bel.
on firm-mod s.m. gl. + box-bl. ironbark on hard-greasy
pale rb. + brown. 23-29 Box-bl. ironbark, occ. pine, occ.
brig., occ belah, on hard-greasy brown to red. Cleared to
25. ca. ½ cleared ~~25~~ 25-27. ~~29~~ uncleared 27-40. 29-40

brig-belah on firm-heavy s.m. gy & brown, eucs. & wilga
~~occ~~ frequent from 38.20440 - ~~41~~ 51 ~~48~~ (Condamine) ~~myall, box, wilga (cleared)~~
~~on heavy s.m. gy.~~ Short-term alts & intergs. of heavy s.m.
med-dark gy & pale greasy, with box, budda, myall,
wilga & coolibah. Mostly cleared.

Condamine (51) - ~~Dalby~~ Kogan :- 51 - 59 box-budda-pine/ w. nl. ironbark ~~etc~~ pine & bulloak on pale
r.b. hard, cleared to 55, then uncleared. 59-67 nl. ironbark,
pine, bulloak, occ. cabbage, occ. wattle. 67-72 alts & intergs box-budda,
[illegible]
wilga, belah, occ. brig on hard-greasy pale r.b. & brown. 72-84
hard country, pale r.b. & pale purplish ~~etc~~ hard & sandy.
with box, nl. ironbark, pine, bulloak & occ. cabbage.
84-87 alts & intergs. of box budda on greasy & brig. belah wilga
on firm, mod s.m. 87-96 (Kogan) hard pale, nl. ironbark, etc.

Kogan (96) - Dalby: -496 - 510 nl. ironbark, pine, bull-oak &
occ. cabbage & box on pale hard. Ca. ½ cleared to 499, then
practically uncleared to 509. 510-17 pop. box, plus yarran
to 15 on greasy - mod. s.m. med. grey. Resembling
Millmerran-Yandilla country. All cleared from 509.

Grassl. (1) at 5.5. 510 3: Chl., Sporob. ca 1ft. pasture, mainly
Chloris-Sporobolus. a little blue grass, a little rare
Spec. 5.7-19 [illegible], gum & box around Condamine R. (at 18) on
same soil types. 520 not more than 1 Chl., Sporob. 1-2 ft.

past. of Sporobolus, Eragrostis & blue-grass on ~~hard~~ greasy-mod. s.m. med. grey. Gast. (1) 20520 ~~20~~ – 29 (Dalby) (no ash or gum) Similar country, with box, & yarran in places, but with perhaps rather more definite short-med. term alts. of greasy and heavy-mod. s.m. black-dark grey. Occasional small open plains, these having the heaviest soil. Dalby itself is still on this intermediate type of country, similar to that round Yandilla, or rather heavier. Certainly not on heavy s.m. black plain. (cf. notes on road to Bell. Prob. the 20 miles before Dalby would be mod. fav. for mult. of Chort.

(532)
Dalby-Oakey:- 32-35 short-med. term. alts. of treeless heavy s.m. black and pop. box woodland w. occ. mulga, yarran, & brig. on greasy. 35-36 Cleared belah-mulga on heavy s.m. dark grey to dark. gradual belts intergr. 5 36-43 trt. box woodland 9"–2ft. on greasy-heavy s.m. pale-grey, very occ. greasy-mixed pale r.b. ~~Sp~~ f. 539 1 Chort, 200 sq f. blue-grass-Chloris-Sporobolis on greasy, mod & heavy s.m. grey. Ipurga. Oedaleus, Froggattina, Aiolopus, Acrida. 5 & 2. Photo 4. showing typical past. of dense bluegrass for this stretch, with a little Chloris in foreground. Young box. Soil greasy – slightly s.m. med. gr. 43-46 excellent short term alts of heavy s.m. black in lower lying treeless areas & greasy pale

gh. w. box woodland on higher area. 40-48 box woodland on mod. s.m. dark grey. 48-55 Open treeless plain ongilgai black heavy s.m. ? Bowenville at 49.2055 no chert, roughly 2ft. very tufty pasture of curly mitchell. Sporobolus sp. a much-branched Aristida. + Chloris ?acicularis. A little bare space between tufts. Apus A. gutt. 55-56 (Jond.) mod s.m. dark grey, leading up to 57-59 greasy pale gh. partly cleared from belah-wilga-box on low rise. 59-65 (Oakey) mod. remnants of heavy s.m. black, mod s.m. choc. & hard pan r.b., treeless flat to v. gently undulating plain.

(58+)
Toowoomba – Kingaroy –

91-97
Turn off at Drayton (41) heavy selfmulching chocolate, rather hilly, with patches from choc. on rises. 75-805 hidden w. t. occ. fine rises s.m. choc. 70. Kingsthorpe. 805-13 heavy s.m. choc. plain. 13-14 hard pan r.b. ridge w. pop. box + wilga. 14-19 [illegible] alternation of [illegible] in choc. & pale grey brown greasy with box woodland. 19-20 hard pale red brown ridge with box [illegible]. 21-22 heavy s.m. chocolate. 22-29 (Kingaroy) hard & sandy pale red-brown with gum, [illegible] (ironbark?), Callitris, [illegible], occ. pine.

(629)
Kingaroy – [illegible]: 27-32 as before. Cleared 32-36 alternation of pale red brown & pale brown hard ~~greasy~~ with poplar box, r.l. box occ. bull oak [illegible] apple

636-41 poplar box – , n.-l. box on pale grey brown greasy, artif. woodland. 41-45 (Karara) hard, gravelly, pale brown w. n.l. ironbark, n.l. box & white box. Art. woodland. Karara – Inglewood. 55-65 mainly uncleared n.l. ironbark, n.l. box & white box on hard brown. 670 (few miles beyond Omanama. 1 Chort/200 yds. 2 ft. blue-grass + 2 ft. Eragrostis & a little slender panic at ca. 9 in. Soil very pale grey greasy. Small amt. bare space. Pasture fairly dry. 682 1 Chort/200 yds. [illegible]. 1 ft. Eragrostis + patches blue-grass on greasy pale brown. Consid. bare space. Pasture rather dry. Red. A. pus. Acrida (ca 1) A. gutt (1). Froggattia. Inglewood 683. From 77-8, there were alts & intergs. of brig. belah + box on firm-mod. gr. brown, with melonholes, & brown hard. Brig. mostly small.

Inglewood (683) – Texas. 83-5 Poplar box & n.l. ironbark on greasy pale brown & hard pale brown, cleared. 85-9 uncleared n.l. ironbark – dotwood on hard gravelly brown. 89 Brigalow – belah on heavy self mulching clay grey brown 89–97 n.-l. ironbark, n.l. box, occ. pine occ. wattle like else. on gravelly brown, red brown & purple brown uncleared 97-701 ditto about ½ cleared 701-4 ditto uncleared 704-17 (Texas)

n.l. box, bl. ironbark, pop. box & other eucs. on brown
greasy & pale gr. & pale purplish hard, some gravelly,
occ. rich r.b. hard. White box also, from 14 to ca. 16.

(20718)
Texas (~~778~~) - Bonshaw:- 18-26 n.l. box, pop. box & bl. ironbark
[illegible]
on pale gr. greasy. Cleared. Froggattia at Texas. 26-35,
n.l. box, bl ironbark & white box on hard pale
alternating with pop. box, gum, apple & stringy in pale-med. gr. dense
greasy in river & creek flats.
brown & purplish gravelly, 727 Ho Chort/200 yds. 2-3ft.
blue-grass - Eragrostis, very little bare space. Pale
brown hard-firm soil. Froggattia, Oed., Acrida, A. gutt. Aemnis.

Bonshaw - Ashford. 35-60 (Ashford) ~~n.l.~~ bl. ironbark, white
box, n.l. box on brown & pale hard, mostly w. coarse purplish
gravel or brown stones. Pop. box also to 43. Gently hilly

Ashford - Inverell:- 60-9 ditto ~~69-71~~ except b.l.
ironbark very occasional. 69-71 n l box white box &
(Inverell)
b.l. ironbark on ~~[illegible]~~ soil. 72-96 white n.l. box on
& black firm-
short-med. trees: alts of heavy s.m. choc., mod. s.m. deep
gently hilly.
r.b., & hard r.b. 785 Khort/200yds. 2ft. dense blue-grass,
a very little bare space. Soil mod. s.m. choc. Oed. Oex.
A. gutt.

(797)
Inverell - Bundarra:- 97-03 Alts of heavy s.m. choc.
& hard pale hard red brown with some timber cleared
& 03-08 hard pale same timber + n.l. ironbark - ? cleared

20805 – 09. at first hard deep red brown with some trees then hard pale uncleared 09 – 19 hard pale with agr. woodland of tableland form 19-22 deep desert Rosewood mainly white box, about ½ cleared. 22-27 (Bundarra) W. box & some W. ironbark on pale hard w. purplish gravel.

Bundarra (27) – Barraba: 27 – 35? Hard. pale similar with purplish gravel – var. eucs. artif. woodland without litter to repeat from 32 35-8 white practically uncleared. 38 – 50 ditto about ½ cleared 50 – 55 pale hard & red brown hard same trees from 55 cleared 58 – ~~63~~ ca. 66 alter of firm to hard red ~~brown~~ brown loamy & occ. firm to hard. S.W. dark red brown to choc. about ½ cleared. 63 – 71 (Barraba). hard. cleared.

Barraba (71) – Gunnedah. ~~74~~ 75. Gunnedah turn-off 876. No Chort., scraps 10" – 1ft. Danthonia pasture w. a little "Andropogon" & Eragrostis. Consid. bare spaces, mainly large, separated by fairly dense patches of grass. 1 A. gutt. Soil hard pale brown. W. box. 75 – 76 Short term alts of hard pale brown, pale r.b. & brown, with red g.b. slightly sm. 76 – 99 Hard brown w. some pale brown & pale. W. box

+ white box. 20885. ?1 Chort/200 yds. 1ft. "Andropogon" plus
a little Panicum + Stipa variabilis. A little bare space.
fairly ref. in [illegible]
Pale hard. 99 - 901 white box. pine on hard brown. 901 —
bl. ironbark. + occ. pine
07. white box, + kurrajong, on hard brown + hard pale rb.
907 12 Chort/1000 yds. 1ft. Stipa ? variabilis - Chloris w.
some herbage, + mod. amt. bare space on brown hard.
Ad. pres. Trogalettina
Occ. Chort. hoppers. 07 - [illegible]. bl box, white box on brown
- pale red brown hard plains, flat country 11-12
pale r.b. w. but. open pale red ~~[illegible]~~ brown hard —
Liverpool range to right (07-17) scattered hills mostly
timbered to left 919 1 Chort/1000 yds. dense 2'6" Aristida -
Eragrostis. w. no bare spaces; on pale rb. greasy w.
bl. box + myall. Not typical of area. Occ. A. gutt.
Pop. box appears from 17. 19-21 pop. box, mult. [illegible], + rosewood
+ white box on brown greasy. 22-28 (Gunnedah) Med. term.
alts. of heavy s.m. (but very loose + sandy) choc. w. plains
grass + Scirpus, + mod. brown r.b. greasy w. pop. box.
Gunnedah (931) - Breeza :- 93x. 7 Chort/1000 yds. 3'-1ft
[illegible]
[illegible]
[illegible]
[illegible]

[illegible]

20939. 5 [illegible]
[illegible]
[illegible]
[illegible]
[illegible] 42 [illegible]
[illegible] 950 [illegible]
[illegible]
[illegible]
[illegible] 49 [illegible] G.M. [illegible]
57-8 [illegible]
[illegible]
[illegible] 15 [illegible]
[illegible]
[illegible]
66-71 [illegible]
[illegible]
7 [illegible]
[illegible]
[illegible]
[illegible]
[illegible]

[illegible].

[illegible] (20986 - 93 [illegible]) [illegible]

[illegible] with [illegible]. 93 - 95 [illegible]

[illegible]. 995 5 [illegible]

[illegible] (spira) [illegible]

[illegible]

[illegible] [illegible]. 95 - 2101 [illegible]. 1 - 3

[illegible]

[illegible] 3 - 6 [illegible]

[illegible]

004 [illegible]. 2100 [illegible] 3 - 5 ft. [illegible]

[illegible]

[illegible]

[illegible]

6 - 7. [illegible]. 7 - 14 [illegible]

[illegible]

[illegible] 14 - 15' [illegible]

[illegible] 15 - 16 [illegible] plain 17 - 21 [illegible]

[illegible]

[illegible]. 020 6 [illegible]

[illegible] [illegible] part of [illegible] [illegible]. [illegible] [illegible] [illegible].
[illegible] [illegible]. [illegible] [illegible]. [illegible] [illegible]. [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]. [illegible] from [illegible] [illegible] [illegible].
21021. [illegible] [illegible] of hand [illegible] [illegible] sandy [illegible] [illegible]
[illegible] [illegible] 25 — 27 [illegible] [illegible] [illegible]. [illegible]. [illegible]
[illegible] [illegible]. 32·0 [illegible] [illegible] [illegible] 2a. 032 [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]. 32–42 [illegible] [illegible]
[illegible] [illegible] [illegible] with [illegible]. [illegible] [illegible], uncleaned 035
42 – [illegible] [illegible] [illegible] hand [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] at [illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible]. 46–7 [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] 48–50 [illegible] [illegible] [illegible] from [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]. 50–5[illegible] [illegible]
[illegible] [illegible] [illegible]. [illegible] 07 [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]. 033 [illegible]. [illegible]
[illegible] [illegible]. [illegible] [illegible] [illegible], [illegible]
[illegible]. [illegible] [illegible] [illegible] [illegible]. [illegible] [illegible] [illegible] [illegible]
56–60 [illegible] [illegible] [illegible] [illegible]. [illegible]. [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] ~~[illegible]~~ 59/ 60–65
[illegible] [illegible] [illegible] hand [illegible] with [illegible] [illegible] [illegible] [illegible]
[illegible] and [illegible] cleaned 65–69 N. [illegible] apple [illegible] [illegible]
not cleaned. 69–70 [illegible] [illegible] [illegible] [illegible] [illegible] head.

21071 2 Chort/ 200yds 9"–2ft. past. Chloris–Eragrostis–
lucerne + Stipa ? variabilis. 2 A. gutt. Soil pale–med.
r.b. hard, 80–84 (Binnaway) Eucs. on pale r.b. + pale brown hard–sandy.

Binnaway (84) – ~~Merrygoen~~ Mendooran: – Merrygoen turn off (88)
88–96 Sandy & hard pale & pale red brown with eucs
96–98 med. red brown, brown, hard, with eucs & pine
98–106 pale r.b. sandy w. eucs & pine. 106–111 (Merrygoen)
med. r.b. & brown hard, w a little pale r.b. & a little dark.
white & r.b. box & pine. & 111–120 (Mendooran). Med. r.b.
hard w. r.b. ~~white~~ box & pine to ca. 118. then pale
r.b. sandy to Mendooran.

Mendooran to Dunedoo (Merrygoen turn off 126) 26–44 (Dun)
med. r.b. hard, w. a little pale r.b. sandy. r.b. & white box, & pine
Small patch mod. sm. dam.g.b. along Talbragar River at 42.
a little r.b. ironbark & dogwood on places.

Dunedoo (44) – Gulgong – 44–57 Pale r.b. & brown hard & some
sandy with app. natural euc. woodland. Kurrajong
from ca. 57. Obs. [illegible] from 63.

Mudgee (196) – Bathurst – 196–217 Pale brown hard hilly,
Cleared. 217–20 Steep timbered hills (white box) 220
Hargraves. (mining town) 20–27 ca ½ cleared. 27–34 Cleared.
34– ~~44~~ 41 ca ½ cleared. 41. Hill End. 44–47 less than ½
cleared 47–55 Ca ½ Cleared. 55–58 Cleared. 58– ~~59~~ 63.

ca ½ cleared. ~~5~~ 21263 – 65 (Sofala) cleared. 65–68 uncleared white box on dark rb. 68–74 ca ½ cleared on pale brown, 74–84 cleared, less steeply hilly. 84 uncleared patch. 84 – ca. 97 (Bathurst) cleared. (318)

Blayney – Cowra:– 18–28 (Carcoar) Same country as Bathurst – Blayney. Pale hard cleared. 28–38 Ditto. 38' Soil becoming definitely more strongly coloured – pale "creamy" red-brown – pale brown. 47 – Pale & red. (rb & brown.)

2 miles E of Jerry's Plains, N.S.W. Probable outbreak centre of *Chort.* Watercourse on heavy self-mulching chocolate soil, with growth of couch & water couch. Top of banks compact greasy brown soil, more or less bare. Chort. adults & *A. guttulosa* nymphs present in watercourse.

29/3/41

KHLK.

~~4(b)~~
3(c)

VELOX

[Pl. 8(a) of Bull. 186, 1945]

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10 ms. E of Dalby, Q. along railway line. Typical pasture for this area; Dense blue-grass with a little *Chloris truncata* in foreground. Ring box. Soil greasy to slightly self-mulching medium grey-brown. After exceptionally wet season.

April 1941

KHLK.

~~4(a)~~

3(b)

VELOX